# BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of	)	DOCKET NO. PG-041370
	)	
PUGET SOUND ENERGY,	)	ORDER NO. 01
	)	
Petitioner,	)	
	)	
Seeking Authorization to Operate a	)	ORDER GRANTING REQUEST
Pressure Regulator Station with a	)	TO OPERATE STATIONS AT
Maximum Allowable Operating	)	PRESSURES EXCEEDING 500
Pressure Greater Than Five Hundred	)	POUND PER SQUARE INCH
psig Pursuant to WAC 480-93-020	)	GAUGE
	)	

#### **BACKGROUND**

- On July 19, 2004, Puget Sound Energy (PSE) filed with the Commission a petition requesting Commission approval to operate three pressure regulator stations at pressures exceeding 500 pounds per square inch gauge (psig) in accordance with WAC 480-93-020.
- WAC 480-93-183 requires gas companies to petition the Commission for a waiver of WAC 480-93-020 if applicable, before operating a pipeline above five hundred psig. Consistent with WAC 480-93-230, the Commission considered the petition at its regular open meeting on September 8, 2004.
- WAC 480-93-020 prohibits operating a facility above five hundred psig within five hundred feet of: a building intended for human occupancy which is in existence or under construction prior to the date the company seeks authorization for construction with the Commission; property which has been zoned residential or commercial prior to the date authorization for construction is filed with the Commission; a well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, which is occupied by twenty or more people, sixty days in any twelve-month period which is in existence or under construction prior to the date the Company seeks

authorization for construction; and a public highway, as defined in RCW 81.80.010(3).

- PSE proposes to build three pressure regulator stations to lower pressure from the Williams Northwest Pipeline Company (Williams). Williams Northwest Pipeline Company is proposing to construct a nine mile pipeline from State Route 92 and Machias Road (Northeast of Lake Stevens) to East Marina View Drive (north of Everett). The proposed construction project is under the review of the Federal Energy Regulatory Commission (FERC) Docket Number PF-04-10-000. The pipeline will be referred to as the Everett Delta segment and will be operated by Williams Northwest Pipeline. The segment is intended to supply gas to the north Everett area. The first pressure regulator station that PSE is proposing will be located at State Route 92 and North Machias Road. This station will lower pipeline pressure from 960 psig to 550 psig on the Everett Delta segment. A second pressure regulator station, known as the Soper Hill District Regulator Station, will be located west of Lake Stevens near the intersection of 83rd Avenue Northeast and 24th Street Northeast. This station will collect gas from the Everett Delta segment at 550 psig and reduce the pressure to 60 psig. The third pressure regulator station will be located at East Marine View Drive. This station will reduce pressure from 550 psig to 250 psig.
- The Commission has adopted the Code of Federal Regulation, Title 49, Part 192 and 480-93 of the Washington Administrative Code as minimum standards for natural gas pipeline construction. The most restrictive natural gas pipeline safety rules specify that pipelines in a highly populated area be operated at pressures producing a hoop stress of no greater than 40 percent of the specified minimum yield strength (SMYS) of the pipe. PSE will construct the proposed stations to operate at a hoop stress of approximately 20 percent of the pipeline's SMYS to provide for a higher margin of safety. This section of pipe is located in a Class 3 location that would typically limit the hoop stress to no more than 50 percent of the SMYS. In addition, PSE has agreed to radiograph 100 percent (90 percent if

impractical) of all girth welds associated with this project. Other safety measures that exceed regulatory requirements include operating at low pipe stress level, providing odorization and remote 24-hour pressure monitoring by PSE's control room personnel.

6 Commission Staff reviewed the request and recommends authorization be granted subject to the following condition(s):

## (a) Filings and Notices:

- 1. Notify the Commission 48 hours prior to the commencement of construction.
- 2. Submit a map of regulator station locations and the final specifications to the Commission within 30 days of project completion.

# (b) **Design and Construction:**

- 1. Stations will be built to maintain a stress level below 20 percent of the Specified Minimum Yield Strength.
- 2. Provide a 24-hour Supervisory Control and Data Acquisition system to monitor the system operating pressures.
- 3. Radiographically examine 100 percent of the girth welds on the 16-inch diameter pipeline except welds that cannot be radiographed. PSE will provide written evidence where radiographs are impractical including the certified radiographers statement. All welds will be inspected and defects will be replaced or repaired in accordance with American Petroleum Institute Standard 1104, 19th Edition or company standard whichever is more stringent. All repaired welds will be radiographed to ensure pipeline integrity and compliance with standards.

- 4. PSE will have cathodic protection test locations at intervals sufficient to determine the adequate protection of the pipeline during surveys. The overall test point location plan shall be reviewed by PSE to ensure that the protection of the entire pipeline may be assessed by the test location chosen.
- 5. Six inches of shading and backfill material will be used around the pipe to protect the pipe and coating. The material around the pipe will be free of sharp rocks with a maximum particle size of ½ inch and containing a large percentage of fines. Rock shield is allowed in places where sand is not available and the backfill material shall be free from sharp objects and large clods that could damage the pipe and coating. If the trench material is not free from sharp or unusually rough surfaces, the trench shall be over-excavated six inches and refilled with select fill material free of sharp rocks with a maximum particle size of ½ inch and containing a large percentage of fines.

## (c) Operations and Maintenance:

- 1. Leak surveys will be conducted in accordance with PSE Operating standard 2575.1000 and PSE Gas Field Procedure 4700.1600. The survey is to be conducted annually.
- 2. Install cathodic protection within 90 days after the pipeline is installed.
- 3. Provide odorization at the State Road 92 and North Machias Road regulator station in compliance with the threshold limits established in 49 CFR 192.625.

The Commission finds PSE's proposed additional safety and design measures for the construction of three regulator stations in a Class 3 location will provide added safety to the public.

#### FINDINGS AND CONCLUSIONS

- 7 (1) The Washington Utilities and Transportation Commission is an agency of the State of Washington vested by statute with the authority to regulate public service companies, including every person or corporation transporting natural gas by pipeline, or having for one or more of its principal purposes the construction, maintenance or operation of pipelines for transporting natural gas. *RCW* 80.28.210.
- 8 (2) PSE is a public service company subject to the jurisdiction of the Commission under the provisions of RCW 80.28.210 and Chapter 480-93 WAC.
- 9 (3) This matter was brought before the Commission at its regularly scheduled meeting on September 8, 2004.
- 10 (4) After examination of the petition and giving consideration to all relevant matters and for good cause shown, the Commission finds it is consistent with the public interest to grant PSE's request to operate above 500 psig, subject to conditions in Paragraph 6 of this order.

#### ORDER

## THE COMMISSION ORDERS:

(1) After the effective date of this Order, the petition of Puget Sound Energy for authorization to operate above 500 psig is granted, in accordance with WAC 480-93-020.

- 12 (2) This authorization is conditioned on the provisions stated in Paragraph 6 of this order.
- 13 (3) The Commission retains jurisdiction over the subject matter and Puget Sound Energy to effectuate the provisions of this Order.

The Commissioners, having determined this Order to be consistent with the public interest, directed the Secretary to enter this Order.

DATED at Olympia, Washington, and effective this 8th day of September, 2004.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

CAROLE J. WASHBURN, Secretary